

# ROCKY MOUNTAIN CLEAN AIR ACTION

1536 Wynkoop, Suite B501 • Denver, CO 80202 • (303) 454-3370

**BY OVERNIGHT DELIVERY**

May 18, 2006

Department of Environment and Natural Resources  
Division of Environmental Services  
523 East Capitol, Joe Foss Building  
Pierre, SD 57501

**RECEIVED**

**MAY 19 2006**

**AIR QUALITY  
PROGRAM**

**Re: Otter Tail Draft Prevention of Significant Deterioration Air Permit**

To Whom It May Concern:

Rocky Mountain Clean Air Action and Jeremy Nichols submit the following comments in response to the South Dakota Department of Environment and Natural Resources' ("DENR's") proposal to issue a prevention of significant deterioration ("PSD") permit (hereafter "draft PSD permit") under the Clean Air Act ("CAA") to Otter Tail Power Company to build a 600 megawatt coal-fired power plant, called Big Stone II. The draft PSD permit, which sets forth best available control technology ("BACT") requirements, is being proposed for issuance by DENR under authority delegated by the U.S. Environmental Protection Agency ("EPA").

The Big Stone II coal-fired power plant cement plant consists of several sources of air pollution, including a coal-fired boiler, electric generator, and coal transfer and crushing activities. Coal burning, crushing, grinding, storage, and transport operations also lead to air pollution, especially fugitive particulate matter pollution. According to the Statement of Basis ("SOB") for the draft PSD permit, the coal-fired power plant will have the potential to emit into the air of eastern South Dakota and western Minnesota over 263 million pounds of particulate matter, including 46,396,000 pounds of particulate matter less than 10 microns in size ("PM<sub>10</sub>"), or 1/7 the width of a human hair, and 217,468,000 pounds of total suspended particulates ("TSP"). Particulate matter less than 10 microns in size is small enough to get into human lungs and is closely linked to respiratory ailments and incidences of asthma.<sup>1</sup> Particulate matter in general is linked to a series of health problems, including premature death, respiratory irritations, aggravated asthma, coughing and difficulty breathing, chronic bronchitis, and decreased lung function.<sup>2</sup>

According to the SOB, the coal-fired power plant also has the potential to emit several million pounds of other criteria air pollutants that are identified as threats to human health and

<sup>1</sup> See, [www.epa.gov/airtrends/pm.html](http://www.epa.gov/airtrends/pm.html).

<sup>2</sup> See, [www.epa.gov/ttn/oarpg/naaqsfin/pmhealth.html](http://www.epa.gov/ttn/oarpg/naaqsfin/pmhealth.html).

According to the SOB, the coal-fired power plant also has the potential to emit several million pounds of other criteria air pollutants that are identified as threats to human health and welfare, including 113,450,000 pounds of sulfur dioxide ("SO<sub>2</sub>") per year, 24,476,000 pounds of nitrogen oxides ("NO<sub>x</sub>") per year, 1,762,000 pounds of carbon monoxide ("CO") per year, and 196,000 pounds of volatile organic compounds ("VOCs") per year. The amount of nitrogen oxides that can potentially be released by the coal-fired power plant is equivalent to the emissions of over 640,732 cars each driven 12,500 miles per year.<sup>3</sup>

For the foregoing reasons, we hereby request that the application for a PSD permit be denied. Numerous flaws in the PSD permit, including the failure to ensure protection of National Ambient Air Quality Standards ("NAAQS") and PSD increments, render the permit wholly unable to ensure compliance with the CAA. Thus, any approval of the Title V permit would be contrary to the CAA. These comments are hereby submitted timely in writing via overnight mail.

### **1. The DENR's Conclusion that the Proposed Permit will Protect Clean Air in Accordance with the Clean Air Act is Flawed**

South Dakota Administrative Rules at 74:36:05:16:1(18) state that operating permits issued to major sources of air pollution, such as Big Stone II, under Title V of the CAA must contain "Provisions for permit emission exceedances due to emergencies that are in accordance with the requirements in 40 CFR Part 70.6(g) (July 1, 2003)." ARSD 74:36:05:16:1(18). Federal regulations at 40 CFR § 70.6(g)(2) provide that "An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations[.]" An emergency is defined as, "any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit." 40 CFR § 70.6(g)(1).

According to the plain language of 40 CFR § 70.6(g) and ARSD 74:36:05:15:1(18), Big Stone II will be allowed to exceed the technology-based limitations set forth in the draft PSD permit. In turn, as a practical matter, this exemption will allow Big Stone II to violate PSD increments and NAAQS, contrary to DENR's assertion otherwise. This is especially evident given that Big Stone II will come dangerously close to violating PSD increments for PM<sub>10</sub>.

Although DENR may claim that dispersion modeling demonstrated compliance with NAAQS and PSD increments, nowhere is it evident that emissions from emergencies were considered in the modeling. This renders the modeling flawed and unable to demonstrate compliance with NAAQS and PSD increments.

As a practical matter, a PSD permit cannot be issued to Otter Tail Power Company for the construction of Big Stone II given the fact that the South Dakota Administrative Rules and regulations at 40 CFR § 70.6(g) allow NAAQS and PSD increments to be exceeded, contrary to the CAA.

---

<sup>3</sup> According to the U.S. EPA, an average vehicle emits 38.2 pounds of nitrogen oxide per year. See, [www.epa.gov/otaq/consumer/f00013.htm](http://www.epa.gov/otaq/consumer/f00013.htm)

## **2. Plantwide SO<sub>2</sub> and NO<sub>x</sub> Limits are Unsupported/Significant Increases in Emissions Will Occur**

The DENR averages SO<sub>2</sub> and NO<sub>x</sub> emissions from Big Stone I for the years 2003 and 2004 to establish plantwide limits that reflect representative operating conditions and avoid PSD analysis. It is unclear why the DENR chose to analyze emissions only from the years 2003 and 2004 to establish representative conditions. The SOB only states, "The 2003 and 2004 calendar years best represent sulfur dioxide and nitrogen oxide emissions in the last five years and will be accepted for determining the two year average from the Big Stone I facility." SOB at 12. There is no explanation as to why the years 2003 and 2003 best represent sulfur dioxide and nitrogen oxide emissions and furthermore, why a two year average is an acceptable methodology for estimating representative emissions.

By all measures, however, Big Stone I is capable of emitting less than the proposed plantwide limit for SO<sub>2</sub> and NO<sub>x</sub> and it is unclear why representative operating conditions do not reflect these lower limits. According to the SOB at page 12, Big Stone I emitted only 12,261 tons/year of SO<sub>2</sub> and only 15,863 tons/year of NO<sub>x</sub> in 2003. When compared to the proposed plantwide limits, this would mean the Big Stone II would lead to an increase of 1,017 tons/year of SO<sub>2</sub> and 585 tons/year of NO<sub>x</sub>, far above significant thresholds for PSD purposes. There is no explanation as to why 2003 emissions alone were not considered as representative operating conditions for the purposes of establishing the plantwide limits. There is also no explanation as to why 2003 emissions were not averaged with 2001 emissions. If 2003 and 2001 are averaged, representative SO<sub>2</sub> and NO<sub>x</sub> emissions are lower than the proposed plant wide limits. It is also unclear why other two-year averages were not considered that also yield lower plantwide limits.

It is unclear why DENR is not selecting the two year periods that yield the lowest SO<sub>2</sub> and NO<sub>x</sub> emissions. By all measures, the lowest SO<sub>2</sub> and NO<sub>x</sub> emissions still represent normal operating conditions (with the exception of 2002 emissions, which are apparently the result of an extended period of outage).

As it stands, Otter Tail Power company seems to be selecting the two years that yield higher average SO<sub>2</sub> and NO<sub>x</sub> emissions. Indeed, emissions in 2004 are higher than emissions in any of the previous five years, raising serious concerns that these emissions are high and do not reflect representative operating conditions. This appears to be nothing more than an attempt by Otter Tail Power Company to raise its plantwide limit and illegally avoid a PSD review.

## **3. Concerns Over Particulate Matter Monitoring**

It is unclear why DENR's BACT determination for PM<sub>10</sub> does not require Otter Tail Power Company to utilize a particulate matter continuous emission monitoring system ("PM CEMS") to measure particulate emissions and ensure compliance on a continuous basis.

The requirement to install, operate, calibrate, and maintain a PM CEMS is not unreasonable or burdensome. Indeed, the EPA promulgated the performance specifications for PM CEMS at 40 CFR § 60, Appendix B, Specification 11, on January 12, 2004. *See, In the Matter of Onyx*

*Environmental Services*, Petition No. V-2005-1 at 13. This promulgation clearly indicates that use of PM CEMS is an accepted means of assessing compliance with particulate emissions.

Furthermore, the EPA has required other coal-fired power plants to install, operate, calibrate, and maintain a PM CEMS. In a 2000 consent decree, the EPA required Tampa Electric Company to install a PM CEMS on one of its coal-fired power plants in Florida.<sup>4</sup> Most recently, in proposed amendments to new source performance standards ("NSPS") for electric utility steam generating units, the EPA stated, "Based on our analysis of available data, there is no technical reason that PM CEMS cannot be installed and operate reliably on electric utility steam generating units." 70 Fed. Reg. 9728. Although the final amendments to the NSPS for electric utility steam generating units did not require the utilization of PM CEMS, the EPA stated that PM CEMS may be used to demonstrate continuous compliance with particulate limits.

We request that, if a PSD permit is issued, the DENR require Otter Tail Power Company to install, calibrate, operate, and maintain PM CEMS at Big Stone II to ensure compliance with the BACT limit for PM<sub>10</sub>.

#### **4. Emission Limits are Unenforceable as a Practical Matter**

The draft PSD permit fails to ensure compliance with limits for PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions. This is due to the fact that the draft PSD permit fails to specify how control technologies are to be maintained and/or operated to ensure compliance with the relevant limits.

Indeed, although DENR is requiring Otter Tail Power Company to utilize baghouses to ensure compliance with the PM<sub>10</sub> limits at Condition 4.1, nothing in the draft PSD permit sets forth requirements that ensure proper operation and maintenance of the baghouses to ensure compliance with the BACT limit. As a practical matter, given that the BACT limits are based on the use of baghouses, the limits are unenforceable due to the lack of baghouse operation and maintenance requirements.

Similarly, nothing in the draft PSD permit sets forth requirements regarding the operation and maintenance of the selective catalytic reduction ("SCR") system. Thus, the ability of the permit to ensure compliance with the NO<sub>x</sub> emission limit at Condition 5.8 is questionable at best. This also calls into question the validity of the DENR's conclusion that no PSD analysis is required for NO<sub>x</sub> emissions from Big Stone II.

Finally, nothing in the draft PSD permit even requires a wet scrubber to be utilized to control SO<sub>2</sub> emissions. The SOB states that a scrubber will be used to control emissions, but nothing in the draft PSD permit actually requires a scrubber to be used, let alone operated and maintained properly. Limits on SO<sub>2</sub> emissions are therefore enforceable as a practical matter as well, calling into question the validity of the DENR's conclusion that no PSD analysis is required for SO<sub>2</sub> emissions from Big Stone II.

The SO<sub>2</sub> and NO<sub>x</sub> emission limits are also unenforceable as a practical matter due to the failure of the permit to require sufficient periodic monitoring and/or monitoring that ensures

---

<sup>4</sup> See, <http://www.epa.gov/compliance/resources/decrees/civil/caa/tecocd.pdf>.

compliance with the plantwide limits. For Units #2, 3, 4, 14, and 15, the SOB states that compliance will be demonstrated through stack testing. SOB at 13. Yet, the draft PSD permit only requires one performance test to demonstrate compliance. This is wholly inadequate with regards to ensuring compliance.

Indeed, in Appalachian Power Co. v. Environmental Protection Agency, the Court of Appeals for the D.C. Circuit specifically held that a one-time performance test failed to constitute sufficient periodic monitoring, stating:

State permitting authorities therefore may not, on the basis of EPA's Guidance or 40 CFR § 70.6(a)(3)(i)(B), require in permits that the regulated source conduct more frequent monitoring of its emissions than that provided in the applicable State or Federal standard, unless that standard...requires only a one-time test.

Appalachian Power Co. v. Environmental Protection Agency, 208 F.3d 1015 (D.C. Cir. 2000) (emphasis added). Thus, on its face and in accordance with the applicable requirements, one-time performance testing does not constitute sufficient periodic monitoring. The draft PSD permit therefore fails to ensure future compliance with plantwide SO<sub>2</sub> and NO<sub>x</sub> limits and the DENR must either complete a PSD analysis for these pollutants or require more frequent and sufficient monitoring of SO<sub>2</sub> and NO<sub>x</sub> emissions from Units #2, 3, 4, 14, and 15.

## **5. BACT Limits are Unsupported**

Several BACT limits set forth in the draft PSD permit are unsupported and/or not adequately explained.

The permit proposes to limit filterable/condensable PM<sub>10</sub> emissions to only 0.03 pounds per million Btu for Unit #13. The SOB claims that this limit, which is "greater than the range" for other PSD permits, reflects concerns over the ability of EPA reference test methods to accurately measure filterable and condensable PM<sub>10</sub>. SOB at 20. However, this claim is unsubstantiated, especially given the fact that other states have imposed lower filterable/condensable PM<sub>10</sub> limits on other coal-fired power plants. For example, the state of Colorado imposed a limit of 0.02 pounds per million Btu for filterable/condensable particulates from a Public Service Company facility in Pueblo, CO in 2005. Similarly, the state of Montana imposed a 0.024 pounds per million Btu limit for filterable/condensable particulates from a Rocky Mountain Power facility in Big Horn County, Montana in 2005. And, in 2003, the state of Arkansas imposed a limit of 0.018 pounds per million Btu for filterable/condensable particulates from a Plum Point Energy facility. These limits, all of which are lower than what Otter Tail Power has requested, have been imposed, despite concerns over the ability of EPA reference test methods to accurately measure filterable and condensable PM<sub>10</sub>. This indicates that DENR could impose a lower PM<sub>10</sub> limit while still addressing Otter Tail Power's concerns over the adequacy of existing reference test methods. We therefore request DENR impose a PM<sub>10</sub> limit of 0.018 pounds per million Btu for filterable/condensable particulates to ensure compliance with BACT. Clearly this is achievable and possible, and therefore is the best available control technology.

There is also no explanation as to why DENR did not require a BACT limit for CO of 0.13 pounds per million Btu. The SOB simply states that DENR recommends a 0.15 pounds per

million Btu limit, but does not explain the rationale for this recommendation. This is especially of concern given that other states have required lower CO limits, clearly indicating that BACT for CO should be lower than what is being recommended. Indeed, the state of Colorado imposed a BACT limit for a Public Service Company coal-fired power plant in Pueblo, CO at 0.13 pounds per million Btu. We request the DENR adopt the same CO limit as this limit clearly constitutes BACT.

There is also no explanation as to why DENR did not require a lower VOC limit than that proposed by Otter Tail Power Company. According to the SOB, BACT limits for VOC emissions have gone as low as 0.0034 pounds per million Btu. SOB at 23. There is no explanation as to why Otter Tail Power Company cannot and should not also be required to meet a BACT limit for VOC emissions of 0.0034 pounds per million Btu.

In relation to sulfuric acid mist BACT limits, there is similarly no explanation as to why and/or how DENR determined a 0.005 pounds per million Btu limit constituted BACT. Especially given that other facilities, such as the Hastings Utilities facility in Nebraska, was required to meet a BACT limit of 0.0004 pounds per million Btu, the DENR's BACT determination appears flawed. Even the state of Colorado required a 0.0042 pounds per million Btu limit for sulfuric acid mist from the Public Service Company facility in Pueblo, CO. We request the DENR impose a BACT limit of at least 0.0042 pounds per million Btu as this clearly constitutes BACT.

In relation to fluoride BACT limits, there is similarly no explanation as to why and/or how DENR determined a 0.0006 pounds per million Btu limit constituted BACT. Especially given that other facilities, such as the Hastings Utilities facility in Nebraska, was required to meet a BACT limit of 0.0004 pounds per million Btu, the DENR's BACT determination appears flawed. Even the state of Colorado required a 0.00049 pounds per million Btu limit for fluorides from the Public Service Company facility in Pueblo, CO. We request the DENR impose a BACT limit of at least 0.00049 pounds per million Btu as this clearly constitutes BACT for fluoride emissions.

## **6. Consultation under the Endangered Species Act is Required**

The EPA has taken the position that "section 7(a)(2) of the ESA [Endangered Species Act] applies to the issuance of a federal Prevention of Significant Deterioration (PSD) permit issued by EPA or a state delegated to act on EPA's behalf" (see attached EPA brief). To this end, as DENR has been delegated to act on EPA's behalf with regards to the issuance of the Otter Tail PSD permit, the agency must consult pursuant to section 7 of the Endangered Species Act ("ESA") with the U.S. Fish and Wildlife Service ("USFWS") over the impacts of the permit issuance to species listed as threatened or endangered under the ESA.

Indeed, under Section 7 of the Endangered Species Act, ("ESA") agencies must consult with the U.S. Fish and Wildlife Service if their actions may affect a species listed as threatened or endangered under the ESA. Consultation must ensure that the construction and operation of Big Stone II does not jeopardize the continued existence of any threatened or endangered species, as well as not adversely modify critical habitat that has been designated for any threatened or endangered species.

To begin with, the best available science strongly indicates that at least three threatened or endangered plants will be negatively affected by the construction and operation of Big Stone II. The SOB in fact, states plainly that plants will be negatively affected by NO<sub>x</sub>, SO<sub>2</sub>, and VOC emissions. This clearly indicates that threatened and endangered plants, such as the western prairie fringed orchid, will be negatively affected, thereby necessitating consultation under the ESA.

**Threatened and Endangered Plants that Will Likely be Negatively Affected  
by Construction and Operation of Big Stone II.**

Species	State	Status	Impacts of Concern	Source
prairie bush clover	MN	threatened	negative impacts associated with NO <sub>x</sub> , SO <sub>2</sub> , and VOC emissions	USFWS 1987
Minnesota dwarf trout lily	MN	endangered	negative impacts associated with NO <sub>x</sub> , SO <sub>2</sub> , and VOC emissions	USFWS 1986b
western prairie fringed orchid	MN, ND, SD	threatened	negative impacts associated with NO <sub>x</sub> , SO <sub>2</sub> , and VOC emissions	USFWS 1989

The DENR and/or Otter Tail Power Company must show that the proposed NO<sub>x</sub>, SO<sub>2</sub>, and VOC limits will adequately protect these threatened and endangered plant species.

The best available science also strongly indicates that several animals listed as threatened and endangered are also likely to be negatively affected by the construction and operation of Big Stone II. Most significantly, mercury emissions, as well as emissions of other metals and/or hazardous air pollutants, such as selenium, arsenic, and other heavy metals, are likely to contaminate waters that support threatened and endangered fish and wildlife. Big Stone II will contribute to water depletions within drainages that support threatened and endangered species.

The pallid sturgeon once inhabited the middle and lower Mississippi River, Missouri River, and parts of the Kansas, Platte, and Yellowstone Rivers. The species has undergone significant declines throughout its entire range and was listed by the USFWS as an endangered species in 1990. Among other things, the USFWS identified habitat loss and degradation as major threats to the sturgeon. Although the construction and operation of large dams within the mainstem Missouri River have been identified as primary threats to the sturgeon, the best available scientific information strongly indicates water depletions within the Missouri and Mississippi River system and water pollution are contributing threats to the species' continued existence (USFWS 1990, 2000). The USFWS (2000) has recognized that habitat modification within major Missouri River tributaries has contributed to the rangewide decline and modification of pallid sturgeon habitat, stating, "Most of the major tributaries of the Missouri

and Mississippi Rivers have also been altered to various degrees by dams, water depletions, channelization and riparian corridor modifications" (p. 111). The best available science therefore strongly indicates water depletions resulting from the operation of Big Stone II are likely to adversely affect the pallid sturgeon.

The interior least tern is a migratory bird that breeds along the Missouri River and many of its major tributaries in Montana, North Dakota, South Dakota, Nebraska, and Kansas (USFWS 2000). The bird depends upon sandbars for breeding habitat. Stabilization of rivers for navigation, hydropower, irrigation, and flood control has led to declines in sandbars due to the elimination of natural processes, such as flooding, which create and maintain this habitat. As a result of significant habitat loss and degradation, the least tern was listed as endangered in 1985 (USFWS 1985).

While threatened by many factors, the USFWS (2000) has identified water pollution as a threat to the interior least tern, stating:

Pollutants entering the waterways within and upstream of breeding areas can negatively impact water quality and fish populations in nearby foraging areas. Strip mining, urban and industrial pollutants, and sediments from non-point sources can all degrade water quality and fish habitat, thereby impacting small-fish populations on which least terns depend (Wilbur 1974, Erwin 1983). In addition, because least terns are relatively high on the food chain, they are in a position to accumulate contaminants which may render eggs infertile or otherwise affect reproduction and chick survival (USFWS 1983, Dryer and Dryer 1985). The extent of this impact, however, is undocumented. Mercury residues have been found in least terns from the Cheyenne River watershed in South Dakota. DDEs and PCBs have also been found in the two coastal subspecies in South Carolina and California (USFWS 1983). Elevated selenium and PCB concentrations were noted in least tern eggs collected on the Missouri River in South Dakota (Ruelle 1991). Allen and Blackford (1997) found 81 percent of 104 least tern eggs collected from the Missouri River exceeded 3µg/g dry weight selenium concentration, the level currently considered safe for avian reproductive success (p. 85).

The best available science therefore strongly indicates that water contamination resulting from the operation of Big Stone II will negatively affect the interior least tern.

The piping plover is a migratory bird that breeds along the Missouri River and many of its major tributaries in the northern Great Plains (USFWS 2000). Like the least tern, the plover depends upon sparsely vegetated, sandy or gravelly beaches and sandbars for breeding habitat. Such habitat has declined significantly throughout the range of the northern Great Plains population of piping plover. According to the USFWS (2000), "Northern Great Plains piping plover habitat along the Missouri River has been reduced by over 80 percent by the construction of dams and the creation and maintenance of a commercial shipping channel" (p. 93). As a result of significant habitat loss and degradation, the northern Great Plains population of piping plover was listed as threatened in 1986 (USFWS 1986).



In 2002, critical habitat was designated for the northern Great Plains population of piping plover and included several miles of the Cheyenne River upstream of Lake Oahe, as well as much of the Missouri River above Pierre, South Dakota to the mouth of the Cheyenne River (USFWS 2002).

While threatened by many factors, the USFWS has identified water pollution as a threat to the piping plover and its critical habitat (USFWS 2000, 2002). The USFWS (2000) stated:

Pollutants entering the waterways within and upstream of breeding areas can negatively impact water quality and forage resources in adjacent foraging areas. Piping plover tolerances to elements in the environment are poorly understood, but given their position on the food chain, they are likely to accumulate contaminants. No evidence of reproductive failure in plovers has been directly linked to elevated contaminant concentrations. Fannin and Esmoil (1993) found elevated levels of selenium and mercury in piping plover eggs collected from the Platte River in Nebraska, and that selenium in particular may be causing embryo mortality without gross embryological defects. Ruelle (1993) found selenium concentrations in piping plover eggs collected from the Missouri River in South Dakota similar to concentrations known to be embryotoxic in other birds. Selenium concentrations were slightly elevated in unsuccessful eggs of piping plovers collected from nesting areas along the Missouri River in North Dakota, but were below concentrations associated with toxicity (Welsh and Mayer 1993). All those projects indicate that the impacts of contaminants combined with the physical degradation of habitat can accelerate population declines for piping plovers (p. 94).

The best available science therefore strongly indicates that water contamination resulting from the operation of Big Stone II will negatively affect the piping plover and its critical habitat.

The Higgins eye pearl mussel is listed as threatened and inhabits the Upper Mississippi River drainage (USFWS 2004). The USFWS identifies water contamination as a threat to the species. According to the USFWS (2004):

An assessment of the available data in the Upper Mississippi River basin suggests contamination of riverine sediments with elevated concentrations of pesticides, heavy metals (Cd, Cu, Hg, and Zn), polychlorinated biphenyls (PCBs), and ammonia may pose the greatest harm to benthic invertebrates (Naimo et al. 1992a; 1992b; Steingraeber et al. 1994; Frazier et al. 1996).

Many contaminants, particularly toxic metals, that enter aquatic systems are adsorbed onto suspended particles and subsequently accumulate in surficial sediments (Tessier and Campbell 1987). Toxic concentrations of dissolved metals are uncommon in oxic surface waters. In the Mississippi River, for example, more than 90% of the trace metal load is associated with particles (Trefry et al. 1986). Thus, these metals can be accumulated by, and directly affect, filter-feeding benthic organisms such as freshwater mussels. Recently, studies have focused on sediment pore water because it is well known that concentrations of inorganic and organic contaminants in pore water can greatly exceed concentrations in overlying surface water. Yeager et al. (1994) demonstrated that

although juvenile *Villosa iris* burrowed less than 1 cm into the sediment, they were not exposed to the overlying water. Thus, although freshwater mussels, in general, can be exposed to metals dissolved in water, associated with suspended particles, and deposited in bottom sediments, juvenile mussels are most likely exposed to elevated metal concentrations found in association with sediment or pore water (pp. 11-12).

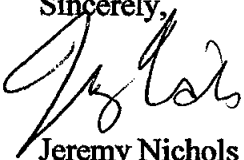
The USFWS (2004) also states, "The effects of heavy metals on freshwater mussels, particularly cadmium (Cd), copper (Cu), mercury (Hg), and zinc (Zn), have been studied more than other contaminants because they are widespread, persistent, potentially toxic, and because many freshwater ecosystems are contaminated with these metals, as a result of human activities (Naimo 1995)" (p. 12). The best available science therefore strongly indicates that contamination resulting from the operation of Big Stone II will negatively affect the Higgins eye pearly mussel.

The Topeka shiner is also likely to be negatively affected by water depletions and water contamination. The shiner was designated an endangered species in 1998 (63 Fed. Reg. 69008). The shiner inhabits streams in eastern South Dakota and southwestern Minnesota, which are likely to be negatively affected by water depletions and contamination from air pollutants. In 2004, critical habitat was designated for the Topeka shiner (USFWS 2004). This designation included stream reaches in southwestern Minnesota.

The DENR and/or Otter Tail Power Company must ensure that threatened and endangered wildlife are adequately protected from water depletions and emissions of mercury, arsenic, and other harmful pollutants.

Thank you for the opportunity to comment. We look forward to a substantive response to our comments.

Sincerely,



Jeremy Nichols  
Rocky Mountain Clean Air Action  
1536 Wynkoop, Suite B501  
Denver, CO 80202  
303-454-3370

Cc: US EPA, Region 8  
U.S. Fish and Wildlife Service, Region 6

#### Literature Cited

USFWS. 1967. Conservation of Endangered Species and Other Fish and Wildlife. 35 Fed. Reg. 8491-8498 (June 2, 1970).

USFWS. 1985. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Interior Least Tern. 50 Fed. Reg. 21784-21792 (July 27, 1985).

USFWS. 1986a. Endangered and Threatened Wildlife and Plants; Determination of Threatened and Endangered Status for the Piping Plover. 51 Fed. Reg. 50726-50734 (January 10, 1986).

USFWS. 1986b. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for Erythronium Propulians (Minnesota Trout Lily). 51 Fed. Reg. 10521-10523 (March 26, 1986).

USFWS. 1987. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for *Lespedeza leptostachya* (Prairie Bush-Clover). 52 Fed. Reg. 781-785.

USFWS. 1989. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for Eastern and Western Prairie Fringed Orchids. 54 Fed. Reg. 39857-39863 (September 28, 1989).

USFWS. 1990. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Pallid Sturgeon. 55 Fed. Reg. 36641-36647 (September 6, 1990).

USFWS. 2000. U.S. Fish and Wildlife Service Biological Opinion on the Operation of the Missouri River Main Stem Reservoir System, Operation and Maintenance of the Missouri River Bank Stabilization and Navigation Project, and Operation of the Kansas River Reservoir System. U.S. Fish and Wildlife Service, Denver.

USFWS. 2002. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Northern Great Plains Breeding Population of the Piping Plover; Final Rule. 67 Fed. Reg. 57638-57717 (September 11, 2002).

USFWS. 2004a. Higgins Eye Pearlymussel (*Lampsilis higginsii*) Recovery Plan: First Revision. Ft. Snelling, MN. 126 p.

USFWS. 2004b. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Topeka Shiner; Final Rule. 69 Fed. Reg. 44736-44770 (July 27, 2004).

RECEIVED  
U.S. E.P.A.

BEFORE THE ENVIRONMENTAL APPEALS BOARD  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.

MAR 17 PM 4:08  
ENVIR. APPEALS BOARD

In re:

Indeck-Elwood, LLC

Permit No. 197035AAJ

PSD Appeal No. 03-04

**BRIEF OF EPA OFFICE OF AIR AND RADIATION**

The Office of Air and Radiation of the Environmental Protection Agency (hereinafter EPA) submits this brief in accordance with the Environmental Appeals Board's (EAB or Board) December 1, 2005 and January 27, 2006 orders regarding Endangered Species Act (ESA) issues in the above-captioned matter. As explained in the prior brief submitted by the EPA Office of General Counsel (OGC), the ESA claim raised in this appeal is now moot by virtue of EPA's conclusion of informal consultation with the U.S. Fish and Wildlife Service (FWS). The EAB thus has no need to, and should not, reach any of the ESA questions set forth in its orders in deciding this appeal. However, because the EAB has requested that EPA answer those questions to assist the EAB's consideration of this matter, EPA now submits the following views regarding the ESA issues.

EPA's view is that section 7(a)(2) of the ESA applies to the issuance of a federal Prevention of Significant Deterioration (PSD) permit by EPA or a state<sup>1</sup> delegated to act on EPA's behalf. Accordingly, some form of consultation under the ESA should be

<sup>1</sup> In some situations, EPA has delegated federal PSD permitting to local air pollution control districts rather than to a state. For simplicity, the term state is used throughout this brief to refer to any entity to which an EPA Region has delegated authority to issue federal PSD permits on behalf of EPA.

conducted in cases such as this where a delegated state issues a PSD permit in accordance with the Clean Air Act (CAA) that may affect a species listed under the ESA.

Consultation on such a permit should ordinarily be completed prior to issuance of the final permit. Consultation need not be completed prior to issuance of the draft PSD permit and subject to the public comment requirements of the PSD program. Although the Illinois Environmental Protection Agency (IEPA) issued the permit in this case to Indeck-Elwood, LLC (Indeck) before EPA Region V completed the consultation, Region V has ensured compliance with ESA requirements and IEPA has satisfied related CAA obligations.

#### **I. Background**

In 2003, IEPA issued a PSD permit to Indeck to construct a 660-megawatt coal-fired electric generating facility. The Petitioners argued in their Amended Petition for Review that EPA failed to comply with the ESA because it did not consult with the FWS regarding potential impacts of the permit on listed species. While this appeal was pending, Region V initiated an informal ESA consultation with the FWS, analyzed the possible effects of the permit on listed species, and concluded that issuance of the permit was not likely to adversely affect listed species or their designated critical habit. The FWS concurred in writing with this finding, thus concluding the ESA consultation. See Status Report (July 17, 2005) and Attachments. IEPA then determined that the ESA consultation process, including the information compiled through that process, did not raise any substantial new questions under the CAA concerning the permit issued to Indeck. IEPA Supplemental Brief at 7. As a result, IEPA declined to supplement the

record for its PSD permit decision or take additional public comment on the permit or information generated in the ESA consultation process.

Nevertheless, the Petitioners requested that the Board remand the Indeck permit to IEPA to supplement the record and provide an additional opportunity for public comment on information developed through the ESA consultation process. Petitioners' Supplemental Response Brief at 7. The Board then requested that OGC address the following questions regarding the interplay between the ESA and the CAA PSD permitting requirements: (1) whether the Board needs to reach the ESA issues to resolve the appeal of the Indeck permit; (2) whether ESA consultation is required in conjunction with the issuance of a PSD permit and, if so, how that process should be conducted; and (3) whether the information typically generated during an ESA consultation would be required to be included in a PSD permit application even if ESA consultation was not required.

OGC responded to the Board's order on January 17, 2005, explaining that the Board did not need to reach the ESA issues to resolve this appeal because these issues became moot when Region V completed consultation with the FWS, thus addressing the claim raised by Petitioners. OGC also pointed out that the ESA consultation process is inherently intra-governmental and does not provide for public comment on that process. Thus, OGC noted that the public comment and record issues raised by Petitioners regarding the information compiled in the ESA consultation arise solely under the CAA and EPA's PSD regulations and do not relate to ESA applicability or compliance. Because there is no need to address the ESA issues to resolve this appeal, OGC did not directly answer the Board's second and third questions. Without resolving whether it

needed to address the ESA issues, the Board reaffirmed its request for a response to those questions. EPA now sets forth below its response to those questions below, but notes that many parts of the Board's questions are difficult to answer in the abstract and might be subject to different answers in specific situations.

## II. The Endangered Species Act Issues In This Case Are Moot

EPA maintains its position that the ESA issues in this case became moot when Region V completed informal consultation with the FWS. Region V's determination that issuance of the PSD permit to Indeck was not likely to adversely affect listed species, with the written concurrence of the FWS, concluded the informal consultation and fully satisfied the requirements of ESA section 7(a)(2). 50 C.F.R. § 402.13; 50 C.F.R. § 402.14(b). Because Region V completed the very process that Petitioners alleged EPA was required to undertake pursuant to the ESA, their ESA claim is moot, and there is no need for the Board to address any issues regarding ESA applicability. The Board has previously recognized that the issue of applicability of ESA consultation requirements is moot once consultation is completed, even when the consultation is completed after the permitting authority has issued the permit. *See In re: Ash Grove Cement Company*, 7 E.A.D. 387, 429 (EAB 1997) (involving challenge to a RCRA permit).

Furthermore, EPA continues to view the public comment and record issues before the Board to be matters arising solely under the CAA. Although the ESA consultation process generated the documents Petitioners now seek to rely upon to challenge the PSD permit, the questions regarding whether those documents need to be a part of the record for the PSD permit or subject to public comment do not arise under the ESA. These issues are present because new documents that are alleged to have relevance to the PSD

permit proceeding were prepared after IEPA issued the final permit. The same issues would exist regardless of whether the documents were developed as part of an ESA consultation or through some other means. Because consultation under the ESA is inherently intra-governmental and does not require public involvement, Petitioners cannot establish a right to comment on the consultation materials under the ESA. Furthermore, Petitioners have not established any grounds under the CAA and EPA's PSD regulations for remanding the PSD permit to supplement the record or accept additional public comment.

**III. Section 7(a)(2) Of The ESA Applies To The Issuance Of PSD Permits By EPA And Delegated States Acting On EPA's Behalf, But Consultation Is Not Always Required**

Although the question is moot for purposes of this case, EPA's view is that section 7(a)(2) of the ESA applies to issuance of federal PSD permits under the CAA. Section 7(a)(2) requires federal agencies to insure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of federally-listed threatened or endangered species or result in the destruction or adverse modification of designated critical habitat of such species. 16 U.S.C. § 1536(a)(2). Under the ESA implementing regulations, the term "action" is defined to include, among other things, the granting of permits. 50 C.F.R. § 402.02. Consistent with these requirements, EPA interprets issuance of a federal PSD permit to qualify as action authorized, funded, or carried out by EPA.

Federal PSD permits can include permits issued directly by EPA or, as in this case, by a delegated state acting on EPA's behalf. Where EPA delegates administration of the federal PSD program, the delegate state implements the substantive and procedural



aspects of the federal PSD regulations on behalf of EPA pursuant to a negotiated agreement. *See In the Matter of West Suburban Recycling and Energy Center*, 6 E.A.D. 692, 703 (EAB 1996). Thus, in issuing the Indeck permit pursuant to a delegation agreement with EPA, IEPA simply stands in the shoes of EPA, and the permit remains a federal action for ESA purposes. *Id.* at 707.<sup>2</sup>

EPA notes that under the ESA regulations, section 7(a)(2) applies only to actions where there is discretionary federal involvement or control. 50 C.F.R. § 402.03. In applying this standard, courts have examined whether the relevant federal agency has discretion to implement measures that would inure to the benefit of listed species. Where such discretion is absent, section 7(a)(2) is not applicable because ESA consultation would be a meaningless exercise. *See, e.g., Sierra Club v. Babbitt*, 65 F.3d 1502, 1509 (9<sup>th</sup> Cir. 1995). Although EPA construes the scope of its discretion under the PSD permitting program to be limited by the terms of section 165 of the CAA,<sup>3</sup> section 165 arguably provides EPA limited discretion to consider and address impacts on listed species that may result from issuance of a federal PSD permit.

Although section 7(a)(2) of the ESA applies, consultation on federal PSD permits is not always required. Under the ESA implementing regulations, consultation (which may be formal or informal) with the ESA Services (the FWS and the National Oceanic and Atmospheric Administration Fisheries Service) is only required where the federal action "may affect" listed species or designated critical habitat. 50 C.F.R. § 402.14(a).

---

<sup>2</sup> In contrast, permits issued by states or eligible Indian tribes under a PSD program approved by EPA in a state or tribal implementation plan (SIP or TIP) would not be federal actions to which section 7 of the ESA applies. PSD permits issued by SIP-approved states or TIP-approved tribes would be state or tribal actions conducted under state or tribal law.

<sup>3</sup> *See* Brief of EPA Office of Air and Radiation and Region V in PSD Permit Appeal No. 05-05 (Prairie State Generation Company).

Thus, where issuance of a federal PSD permit has no effect on listed species or critical habitat, consultation is not required. In this case, EPA Region V determined that, while issuance of the Indeck permit may affect listed species (thus triggering the requirement to consult), it was not likely to adversely affect such species. The FWS concurred in writing with that finding, thus concluding the consultation and satisfying section 7(a)(2) requirements. 50 C.F.R. § 402.13; 50 C.F.R. § 402.14(b).

#### **IV. Where Delegated States Issue PSD Permits, EPA Retains Responsibility For ESA Compliance**

Although EPA may, as it did with Illinois, delegate PSD permitting responsibilities to a state, EPA retains the non-delegable responsibility to ensure ultimate ESA compliance. The ESA regulations provide that federal agencies may, upon written notice to the ESA Service(s), designate non-federal representatives (which could be the permit applicant or a delegated PSD state) for certain key purposes, such as preparing relevant assessments and conducting informal consultation. 50 C.F.R. § 402.08. However, the ESA regulations make clear that "[t]he ultimate responsibility for compliance with section 7 remains with the Federal agency." 50 C.F.R. § 402.08; *see also*, 51 Fed. Reg. 19926, 19939 (June 3, 1986) (preamble to ESA regulations). In the case of the Indeck permit, EPA Region V fulfilled this responsibility by directly conducting informal consultation with the FWS.

As a practical matter, EPA must retain sufficient control over the PSD permitting process administered by a delegated state to allow time for any required consultation to occur and to ensure that permitting and project activities do not proceed beyond a point that would affect EPA's ability to comply with the ESA. Several of EPA's PSD program delegation agreements expressly reserve EPA's responsibilities for ESA compliance and

prohibit issuance of permits until delegated states are notified that EPA is satisfied ESA obligations have been met. *See In re: Metcalf Energy Center*, PSD Appeal No. 01-07, slip op. at 41 (EAB, Aug. 10, 2001).

**V. Although Related To The Same Action, The ESA And PSD Permitting Processes Are Separate Processes That May Proceed In Parallel**

Section 7(a)(2) of the ESA imposes distinct requirements on federal PSD permitting actions that neither arise from, nor are specifically referenced in, the CAA or PSD regulations. Significantly, section 7(a)(2) neither authorizes nor requires public involvement in the interagency consultation process. *See* 51 Fed. Reg. 19926, 19928 (June 3, 1986). There is thus no right derived under the ESA for the public to participate in an ESA consultation.<sup>4</sup> Moreover, nothing in the CAA or PSD regulations requires that information developed to comply with a separate federal requirement such as the ESA be available for public comment during the PSD permitting process. As a result, ESA consultation, whether formal or informal, may, as it did in the case of the Indeck permit, proceed entirely separate from the PSD permitting process.

**A. Consultation should ordinarily conclude prior to issuance of a final federal PSD permit, but not necessarily before issuance of the draft permit and public comment period.**

Section 7(a)(2) of the ESA and the implementing regulations do not specify the precise time when an ESA consultation must conclude relative to an agency action process. Once the consultation process is initiated, section 7(d) of the ESA prohibits agencies (and permit applicants) from making any irreversible or irretrievable commitments of resources that would have the effect of foreclosing the formulation or

<sup>4</sup> Under the ESA regulations, permit applicants have certain limited rights to participate in formal consultations on federal permitting actions. 50 C.F.R. § 402.14

implementation of any reasonable and prudent alternatives that may be needed to avoid violating section 7(a)(2). 16 U.S.C. § 1536(d); 50 C.F.R. § 402.09.

Consistent with this requirement, EPA believes the most efficient way to ensure compliance with the ESA under the PSD permitting program is generally to complete consultation before the final PSD permit is issued because there are limited opportunities to stay or reopen a PSD permit after this point. In the absence of a timely appeal to the EAB, a federal PSD permit is final agency action. 40 C.F.R. § 124.19(f)(1). However, in some cases, it may be permissible to complete consultation after final issuance of a PSD permit.<sup>5</sup> Although Region V did not complete consultation on the Indeck permit before IEPA issued it, EPA appropriately completed its ESA compliance during this appeal pending final agency action on the permit. *See*, 40 C.F.R. § 124.19(f); 40 C.F.R. § 124.19(d).

A PSD permitting authority may issue a draft permit and complete the PSD public comment process prior to completion of an ESA consultation because these steps in the PSD process do not amount to an irreversible or irrevocable commitment of resources. The permit applicant may not begin construction prior to issuance of the final PSD permit, 40 C.F.R. § 52.21(a)(2)(iii), and the permitting authority still has the opportunity to establish conditions in the PSD permit or request action by the permit applicant to address impacts on listed species.

Furthermore, neither the CAA nor EPA's PSD permitting regulations require completion of an ESA consultation prior to the issuance of a draft PSD permit or the completion of the public comment period on the PSD permit. EPA does not construe the ESA consultation process to be an "appropriate consideration" for public comment under

---

<sup>5</sup> For instance, in some cases additional EPA approvals may be necessary before a project may proceed.

the language in section 165(a)(2) of the CAA. *See* 42 U.S.C. § 7475(a)(2). Nothing in the structure or history of the CAA or ESA suggests that Congress intended for the CAA to establish an opportunity for public comment on an ESA consultation that is not provided under the ESA itself. The applicable EPA permitting regulations do not require that documents from an ESA consultation be made available during public review and comment on a PSD permit. *See* 40 C.F.R. § 124.9.

A PSD permitting authority has the discretion to reopen the public comment process on the PSD permit if information that comes to light during the public comment process or an appeal of the permit raises substantial new questions concerning the permit under the CAA and PSD regulations. *See* 40 C.F.R. § 124.14(b); 40 C.F.R. § 124.19(d). However, these circumstance do not exist in this case with respect to the Indeck permit. Informal ESA consultation concluded with a finding that the Indeck permit is not likely to adversely affect listed species without any need to modify the permit or the proposed source. Based on this finding, IEPA concluded that the consultation did not raise any substantial new questions with respect to the PSD permit. Furthermore, an additional opportunity for comment is not required in this case because IEPA did not seek to bolster its permitting action with additional information compiled in the consultation process. *See In re: Hawaii Electric Light Co.*, 8 E.A.D. 66, 102-103 (EAB 1998).

Petitioners allege that they have been denied an opportunity to comment on the soils and vegetation impacts of the proposed facility as they relate to the additional impact analysis requirement of EPA's PSD regulations (40 C.F.R. § 52.21(o)), but this is not the case. One commenter said there was "significant evidence" suggesting that the facility would have a significant effect on soils and vegetation, but this commenter

apparently did not provide IEPA with the documents or references that comprised this evidence. IEPA Responsiveness Summary at Comment 56; Petitioners Supplemental Response Brief at 10. Under the federal PSD program, interested persons "must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period." 40 C.F.R. § 124.13. Because all such issues and argument on a PSD permit should be raised by this time, there is generally no opportunity to comment on the comments of other parties (or by analogy the contents of a parallel ESA consultation) unless this information raises substantial new issues, which was not the case here.

B. A record must be maintained on the PSD permitting action to demonstrate compliance with the CAA and, where consultation is required, the ESA.

The documents generated in an ESA consultation do not necessarily need to be included as part of the record for public comment on the PSD permit or for purposes of determining compliance with the CAA and EPA's PSD regulations. To comply with the CAA and EPA regulations, the record must contain all information necessary to demonstrate that the requirements of section 165 of the CAA and section 52.21 of EPA's regulations are satisfied. IEPA concluded that the information generated during Region V's informal consultation did not need to be part of its file to show that its final permit decision complied with the CAA and PSD regulations. Although the ESA consultation focused on listed plant species, and thus arguably bears some relation to the additional impacts analysis conducted as part of a PSD application, the conclusion that issuance of the permit would have no likely adverse effects supports IEPA's determination that the consultation raised no substantial new questions regarding the permit. Thus, IEPA's

record demonstrating compliance with the CAA and PSD requirements was complete notwithstanding the absence of the ESA documents.

In this case, the Board should use the standards it has previously applied to determine whether the record for showing compliance with the CAA and PSD regulations should be supplemented with documents that were not available at the time a final PSD permit was issued. The Board has indicated that it may be appropriate to supplement the record when there is an unusual delay between the close of the public comment period and the date of permit issuance or other extraordinary circumstances are present. *See In the Matter of Columbia Gulf Transmission Co.*, PSD Appeal No. 88-11, Order on Motion for Stay at 3 n. 3 (Adm'r, July 3, 1990). Furthermore, the Board has denied requests to supplement the record when the information was reasonably ascertainable during the comment period. *See In re: Sumas Energy 2 Generation Facility*, PSD Appeal No. 05-03, slip op. at 19 n. 18 (EAB, May 27, 2005); *In re: General Motors Corporation, Inland Fisher Guide Division*, 5 E.A.D. 400, 404-5 (EAB 1994) (involving a RCRA permit).

Based on these standards, in this case involving Indeck, the Board need not supplement the record for demonstrating compliance with the CAA with the documents from the ESA consultation or remand for IEPA to do so. Extraordinary circumstances are not present because, despite the delay between the close of comment period and the completion of the ESA consultation, the consultation led to a conclusion (with concurrence of the expert ESA Service) that the project was not likely to adversely affect listed species, and no changes to the permit were needed. In addition, the effects of the proposed source on soils and vegetation (the PSD issue Petitioners argue is affected by the documents developed in the ESA consultation) was reasonably ascertainable during

the comment period. One commenter stated that there was significant evidence that the proposed source would significantly affect soils and vegetation. IEPA Responsiveness Summary at Comment 56.

Documents demonstrating EPA's compliance with ESA section 7(a)(2) consultation requirements, and rendering Petitioners' ESA claim moot, are presently before the Board. See Status Report (July 17, 2005) and Attachments. Because the Board may take official notice of these documents, there is no need for the Board to remand the permit to IEPA on ESA-related grounds. See, e.g., *In re: Indianapolis Power and Light Co.*, 6 E.A.D. 23, 29 n. 12 (EAB 1995). EPA is not taking a position here on whether the Board has jurisdiction to address alleged ESA violations in connection with issuance of federal PSD permits. EPA notes that unlike certain other federal environmental permitting programs, the PSD regulations do not reference potentially applicable ESA requirements, thus raising an issue regarding the Board's jurisdiction to address alleged violations of those requirements. See, *Metcalf Energy Center*, PSD Appeal No. 01-07, slip op. at 42 n. 20; compare, 40 C.F.R. § 52.21; 40 C.F.R. § 122.49; 40 C.F.R. § 144.4; 40 C.F.R. § 270.3.

C. ESA consultation may require information beyond what would normally be required in a PSD permit application and the review of such an application.

The information required for both PSD permit applications and ESA consultations varies depending on the nature of the proposed source, the location of the source, and the species in the area. As a result, generalizations about the information required in a PSD permit application and an ESA consultation are difficult. However, in EPA's experience, the ESA consultation process has typically required a compilation of additional information that is not required under section 52.21 of EPA's PSD regulations.



ESA consultation on a PSD permit typically involves development of biological information evaluating the potential effects of the action on listed species and their designated critical habitat. Such an evaluation would, for instance, take into account the status of the listed species and the environmental baseline in the area, the manner in which the particular effects of the action may impact such species, the cumulative effects of future state or private activities that are reasonably certain to occur in the area, as well as the effects of other interrelated or interdependent actions. *See, e.g.*, 50 C.F.R. § 402.02 (defining "effects of the action"); 50 C.F.R. § 402.14. In developing this information and fulfilling their roles in the consultation, EPA and the ESA Services are required to rely on the "best scientific and commercial data available." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14.

Under section 52.21(n) of EPA's regulations, a PSD permit applicant must "submit all information necessary to perform any analysis or make any determination required under this section." 40 C.F.R. § 52.21(n). The following four analyses and determinations are the primary requirements of section 52.21 of EPA's regulations and section 165 of the CAA: (1) a demonstration that the proposed source will not cause or contribute to air quality concentrations that exceed the NAAQS or PSD increment (40 C.F.R. § 52.21(k); 42 U.S.C. § 7475(a)(3)); (2) a top-down analysis of pollution control techniques to demonstrate that the facility will apply Best Available Control Technology (40 C.F.R. § 52.21(j); 42 U.S.C. § 7475(a)(4)); (3) an analysis of additional impacts on soils, vegetation, and visibility (40 C.F.R. § 52.21(o); 42 U.S.C. § 7475(c)(3); 42 U.S.C. § 7475(a)(6)); and (4) in cases where a source may affect a class I area, an analysis of impacts on visibility and any other Air Quality Related Values that may be of interest to

the Federal Land Manager (40 C.F.R. § 52.21(p); 42 U.S.C. § 7475(d)). To satisfy these requirements, an applicant is not ordinarily required to supply specific information on the potential impacts of the proposed facility on listed species or designated critical habitat.

Although a PSD application may need to include some biological information as part of the additional impacts analysis or to evaluate (where required) potential impairment to AQRVs in a class I area, these analyses would generally not be as comprehensive as an ESA biological evaluation, nor would the information necessarily focus on federally-listed species (if they address such species at all). Thus, while there may, in certain cases, be some overlap in information requirements between the two statutes, the CAA and PSD regulations do not specifically require applicants to include the level of biological information called for in an ESA consultation.

#### VI. Conclusion

The submissions before the Board demonstrate that Region V and IEPA have satisfied each of the ESA and PSD requirements described above. When the FWS concurred with EPA's determination that the Indeck PSD permit was not likely to adversely affect listed species, this concluded informal consultation and satisfied EPA's obligations under section 7(a)(2) of the ESA. Petitioners' claim on this issue is thus moot. In addition, in accordance with the PSD provisions of the CAA, IEPA provided a full opportunity for interested persons to comment on the potential impacts of the proposed source. IEPA has also considered whether the information developed through ESA consultation raised any substantial new questions with respect to the PSD permit under the PSD requirements. In light of the outcome of the ESA consultation, IEPA concluded that the consultation did not raise substantial new questions under the PSD

regulations and elected not to supplement the PSD permitting record or accept additional comment from the public. Because Region V and DEPA properly addressed the ESA-related issues raised by the Petitioners in this manner, there is no cause for the Board to remand this matter on ESA-related grounds.

Dated: March 17, 2006.

Respectfully submitted,

ANN R. KLEE

General Counsel

RICHARD B. OSSLAS

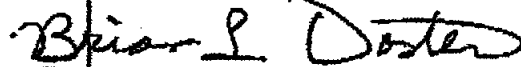
Associate General Counsel

Air and Radiation Law Office

TONY GUADAGNO

Acting Associate General Counsel

Cross-Cutting Issues Law Office



BRIAN L. DOSTER

Air and Radiation Law Office

TOD E. SIEGAL

Cross-Cutting Issues Law Office

1200 Pennsylvania Ave. N.W.

Washington, DC 20460

Telephone: (202) 564-7606

Facsimile: (202) 564-5603

## CERTIFICATE OF SERVICE

I hereby certify that copies of this Brief of EPA Office of Air and Radiation were served on the following persons in the manner indicated below:

*By Facsimile and First Class U.S. Mail*

Bruce Nilles, Esq.  
Sierra Club  
214 North Henry Street  
Madison, WI 60601  
Telephone: (608) 257-4994  
Facsimile: (608) 257-3513

James Schneider  
Indeck-Elwood, L.L.C.  
600 N. Buffalo Grove Rd.  
Buffalo Grove, IL 60089  
Telephone: (847) 520-3212  
Facsimile: (847) 520-9883

Robb H. Layman, Esq.  
Assistant Counsel, Illinois EPA  
1021 N. Grand Ave. East  
P.O. Box 19276  
Springfield, IL 62794-9276  
Telephone: (217) 524-9137  
Facsimile: (217) 782-9807

*By EPA Pouch Mail*

Bertram Frey, Acting Regional Counsel  
Susan Tennenbaum  
Environmental Protection Agency  
Office of Regional Counsel, Region 5 (OC-14J)  
77 West Jackson Blvd.  
Chicago, IL 60604-3507  
Telephone: (312) 886-1308  
Facsimile: (312) 886-0747

*By First Class U.S. Mail*

Ann Brewster Weeks  
Clean Air Task Force  
18 Tremont St., Suite 530  
Boston, MA 02108

Keith Harley  
Chicago Legal Clinic, Inc.  
205 West Monroe, 4<sup>th</sup> Floor  
Chicago, IL 60606

Verena Owen  
Lake County Conservation Alliance  
421 Ravine Dr.  
Winthrop Harbor, IL 60096

Jeremy R. Hojnicky  
Openlands  
25 East Washington, Suite 1650  
Chicago, IL 60602

*Brian L. Doster*

Brian L. Doster